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GIRMA, FEKADESEELASS				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/537,527

**Applicant(s)**

HAYAMA ET AL.

**Examiner**

Fekadeselassie (Fred) Girma

**Art Unit**

4163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyers et al (US Patent No. 4068232).

3. With regard to claim 1, Meyers teaches, a non-contact passive IC card system (Fig 2) comprising, an interrogator, and a responder; wherein said interrogator comprises a generation unit for generating carrier signal by utilizing microwave as carrier, (Fig 2, 102; Column 5 line 3 -13 & Column 6 line 23-27);

4. A generation unit of clock signal for time management of a circuit in said responder, (Fig 2, 29; Column 4, line 7- 15);

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5. A generation step of generating carrier signal by utilizing microwave as a carrier ( Fig 2, item 102; Column 5 line 3 -13 & Column 6 line 23-27);
6. A generation step of clock signal for time management of a circuit in said responder (Fig 2, item 29; Column 4 line 7 – 30),
7. A generation unit for generating transmitting signal by multiplexing the carrier signal generated by said generation unit for generating a carrier signal and the clock signal generated by said generation unit for generating a transmitting signal (Fig 2, 102, 108);
8. A transmitter unit for transmitting a transmitting signal generated by said generation unit for generating a transmitting signal (Fig 2, 104, 105);
9. A responder, which includes a receiver unit of the responder for receiving the transmitting signal from the transmitter unit of the interrogator, (Fig 2, 10, & 11);
10. A signal processing unit for processing the transmitting signal received from said receiver unit of the responder, (Fig 2, 28, 27);

11. A power recovery circuit unit for generating power by the transmitting signal received from said receiver unit of the responder, (Fig 2, 16);
12. An extraction unit of clock frequency component for extracting a frequency component of said clock signal by the transmitting signal received from said receiver unit of the responder, (Fig 2, 29);
13. A clock generation unit for time management of a circuit in said responder by the clock frequency component extracted by said extraction unit of clock frequency component, (Fig 2, 29);
14. With regard to claim 2, Meyers also teaches, an interrogator for a non-contact passive IC card system with a responder, (Fig 2, 12);
15. A generation unit for generating carrier signal utilizing microwave as a carrier, (Fig 2, 102 and Column 6 line 20-30);
16. A generation unit of clock signal for time management of a circuit in said responder, (Fig 2, 29 and Column 4, 10 - 35);

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17. A generation unit for generating a transmitting signal by multiplexing the carrier signal acquired by said generation unit for generating carrier signal and the clock signal generated by said generation unit for generating a transmitting signal, (Fig 2, 107);

18. A transmitter unit for transmitting a transmitting signal generated by said generation unit for generating a transmitting signal, (Fig 2, 104, 105, 109, 110);

19. With regard to claim 3, Meyers teaches a responder for a non-contact passive IC card system with an interrogator (Fig 2, 20);

20. A receiver unit of the responder for receiving the transmitting signal from the transmitter unit of said interrogator, (Fig 2, 11, 24);

21. A signal processing unit for processing the transmitting signal received from said receiver unit of the responder, (Fig 2, 28, 27);

22. A power recovery circuit unit for generating power by the transmitting signal received from said receiver unit of the responder, (Fig 2, 16);

23. An extraction unit of clock frequency component for extracting a frequency component of said clock signal by the transmitting signal received from said receiver unit of the responder, (Fig 2, 29);
24. A clock generation unit for time management of a circuit in said responder by the clock frequency component extracted by said extraction unit of clock frequency component, (Fig 2, 29);
25. With regard to claim 4, Meyers teaches, an operation method of a non-contact passive IC card system comprising of an interrogator and a responder, (Fig 2);
26. The interrogator executes a process, (Fig 2, 12);
27. A generation step of generating a transmitting signal by multiplexing the carrier signal generated by said generation step of generating carrier signal and the clock signal generated by said generation step of generating transmitting signal, (Fig 2, 108);
28. A transmission step of transmitting a transmitting signal generated by said generation step of generating a transmitting signal, (Fig 2, 102);

29. The responder executes a process, (Fig 2, 11, 24);
30. A reception step in the responder of receiving the transmitting signal from the transmission step in said interrogator, (Fig 1, 12, 17, 20);
31. A signal processing step of processing the transmitting signal received from said reception step in the responder, (Fig 2, 16, 24);
32. A power recovery step of generating power by the transmitting signal received from said reception step in the responder, (Fig 2, 16);
33. An extraction step of clock frequency component of extracting a frequency component of said clock signal by the transmitting signal received from said reception step in the responder, (Fig 2, 29);
34. A clock generation step for time management of a circuit in said responder by the clock frequency component extracted by said extraction step of clock frequency component, (Fig 2, 29).
35. With regard to claim 5, Meyers teaches, the IC card system a frequency of said microwave is included in VHF-band (30 MHz - 300 MHz), UHF-band (300 MHz ~ 3 GHz), and SHF-band (3 GHz - 30 GHz), (Column 6 line 20-30).



36. With regard to claim 6, Meyers teaches, the non-contact passive IC card system, wherein said signal processing unit, (Fig 2, 16, 24) comprises;

37. A demodulation means for sampling and demodulating the transmitting signal received from the interrogator according to the clock frequency component oscillated by the clock oscillation unit, (Fig 6, 72 & 73);

38. With regard to claim 7, Meyers teaches, the responder wherein said signal processing unit comprises a demodulation means for sampling and demodulating the received transmitting signal from the interrogator according to the clock frequency component oscillated by the clock oscillation unit, (Fig 6, 76, 73, 72);

39. With regard to claim 8, Meyers teaches, the operation method of the non-contact passive IC card system wherein said signal processing step includes a process comprising a demodulation step of sampling and demodulating the received transmitting signal from the interrogator according to the clock frequency component oscillated by the clock oscillation unit, (Fig 6, 76, 73, 72, & Fig 4, Column 6 line 56 – column 7 line 10).

### **Conclusion**

40. The prior art made a record and not relied upon is considered pertinent to applicant's disclosure. Meyers (US Patent 4068232), Ueno (6946950), Hirata (5247305), MacLellan (5929779), Saito (US Patent No. 7277681), Fujisawa (US Patent Publication 2002/0107054), Carroll (US Patent 4724427) and Saitoh (US Patent 5929414), teach a responder transmits a transmitting signal, modulated with a clock, and the responder extracts the clock signal and uses to drive the information from logic circuit, and the carrier signal rectified and uses as power supply for the responder and a carrier signal to transmit back the information in the responder.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fekadeselassie (Fred) Girma whose telephone number is 571-270-5886. The examiner can normally be reached on Monday thru Thursday.

42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Robinson can be reached on 571-272-2319. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see

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<http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. G./

*/Mark A. Robinson/*

*Supervisory Patent Examiner, Art Unit 4163*